Figure 1

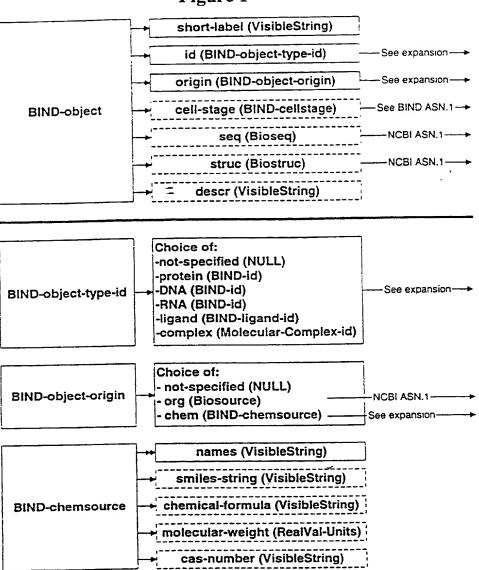


Figure 2

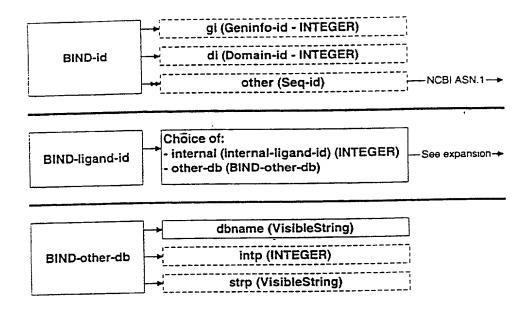


Figure 3

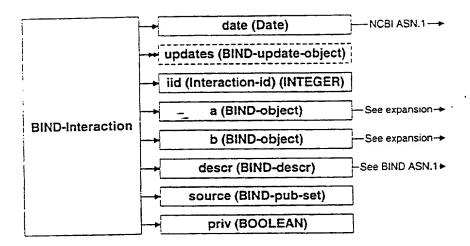


Figure 4

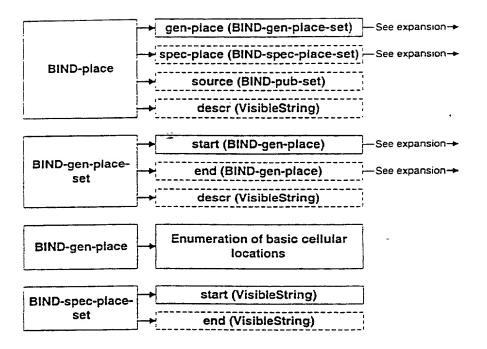


Figure 5

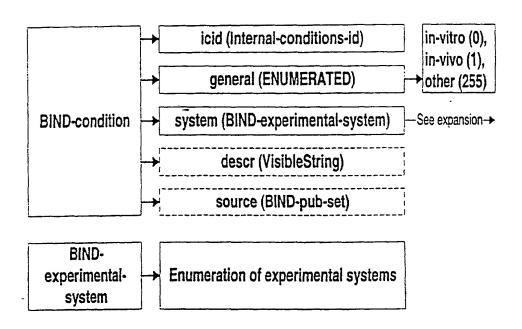


Figure 6

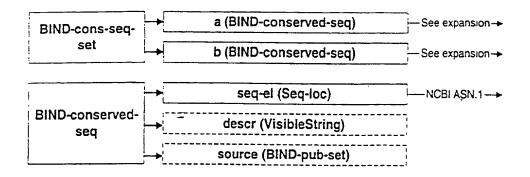


Figure 7

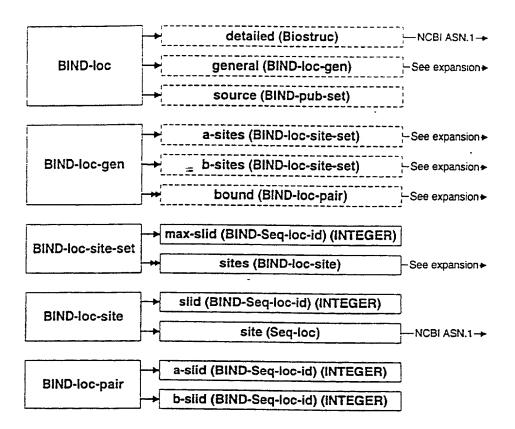


Figure 8

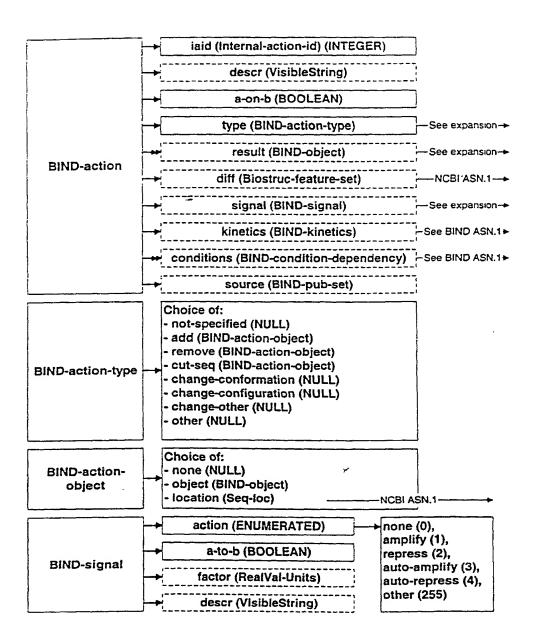


Figure 9

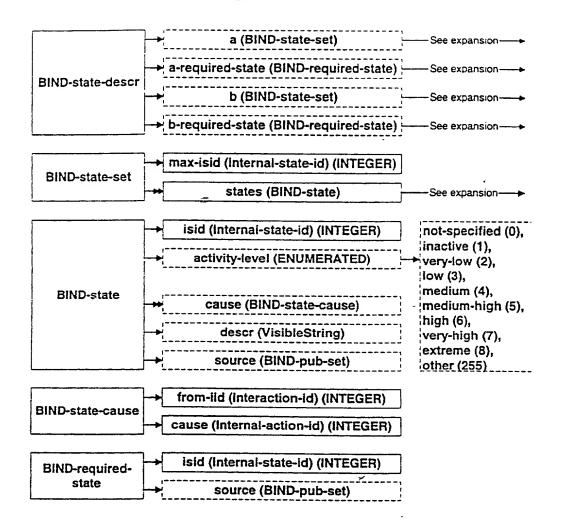


Figure 10

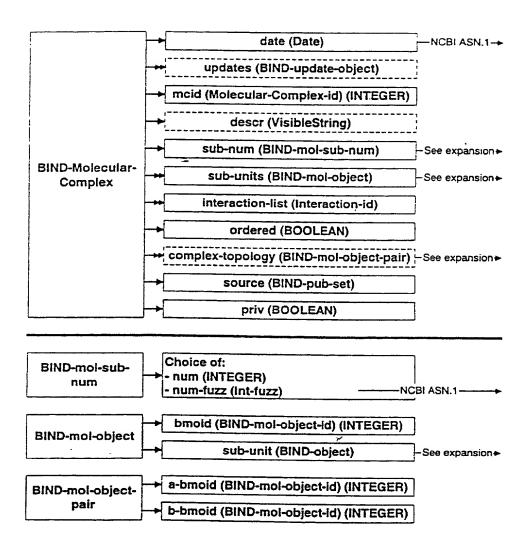


Figure 11

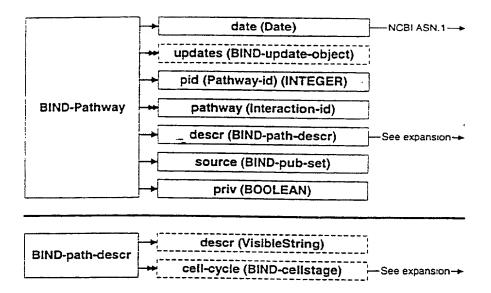


FIGURE 12

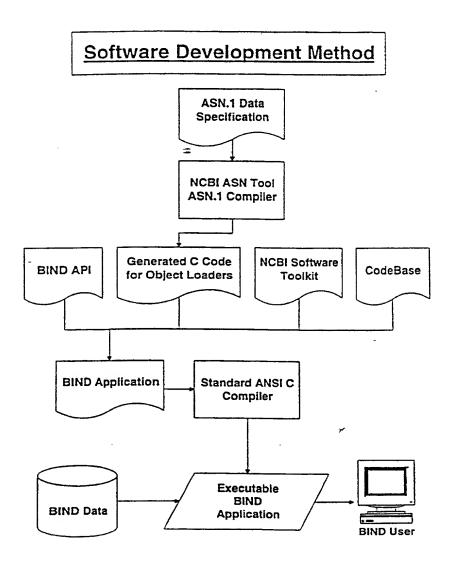


FIGURE 13

BIND Major Subsystem Overview Database Management System Web based output tools. Basic formatted text output. HTML/Javascnpt based data management with C based CGI/ HTML / CGI / JavaScript codebase backend. Backend Database **Autonomous Data Mining Agents** (Spiders that find new pathways) C based CodeBase Database on SGI Origin 200 Visualization tools -Interactions displayed as 3D graphics 'hotlinked' to the database for information retneval Database summary tools -Standardization of symbolic interaction HTML/CGI diagrams HTML/Java

FIGURE 14

Data Entry Process Manual Data Entry User accesses BIND User writes data entry page over paper **Automated** the Web **Data Entry** User enters User obtains interaction, accession molecular complex numbers and and pathway data Data PubMed IDs via HTML forms. Gathering from various Agent collects databases CGI Program on Web data including BIND server processes and valldates information. Interacts dynamically with user via generated web pages CGI Program saves data to BIND after user is finished annotating records indexer or Curator Validates Records BIND **Database**